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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/538,797

10/13/2005

Pascal Bruhat

124298

9508

25944

7590

07/17/2007

OLIFF & BERRIDGE, PLC  
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ALEXANDRIA, VA 22320

EXAMINER

HEPPERLE, STEPHEN M

ART UNIT

PAPER NUMBER

3753

MAIL DATE

DELIVERY MODE

07/17/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/538,797

Applicant(s)

BRUHAT ET AL.

Examiner

Stephen M. Hepperle

Art Unit

3753

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 12-17 is/are rejected.
- 7) ☒ Claim(s) 11 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 June 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 10/31/05.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the fastening means of claim 7 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-4 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Fenner. Fenner shows a pressure regulator with adjustable spring bias. Adjustable ring 49 fits between the handle 45 and the spring. The handle has an expanding temperature responsive member that moves push rod 43. The phrase “used to take account of the variation of the altimetric pressure” is seen as suggested use. However, any adjustment made to the bias inherently takes into account altitude, as the barometric pressure is on the back side of the diaphragm.

Claims 1-3 and 12-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Valince. Valince shows a pressure regulator with adjustable bias. Element 42 is turned, which moves adjustable ring 41 to compress the spring. At high pressures, membrane separates from seat 20 against spring 23 to vent the regulator through orifice 43. Note rod 19. The phrase “used to take account of the variation of the altimetric pressure” is seen as suggested use. However, any adjustment made to the bias inherently takes into account altitude, as the barometric pressure is on the back side of the diaphragm.

Claims 1-2 and 16-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Teay. Teay shows a pressure regulator having adjustable bias. Removing cap provides access to adjustment means 41 (which is still “from the outside”), which adjusts the bias. The phrase “used to take account of the variation of the altimetric pressure” is seen as suggested use. However, any adjustment made to the bias inherently takes into account altitude, as the barometric pressure is on the back side of the diaphragm. Regarding claim 17, note adjustment means 71 (Fig. 5) which can be set to any desired value, including at least some value above 20% of the nominal flow. Regarding claim 17, note reset means 60.

Claims 1-3 are rejected under 35 U.S.C. 102(e) as being anticipated by Harneit. Harneit shows a pressure regulator where the bias of spring 19 is intended to be adjusted at least in part to compensate for altitude (Abstract). The handle 4 has indicia 26 and when turned, moves adjustable ring 16, which is between the handle and spring.

Claims 1-3 and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Carter et al. Carter shows a regulator with adjustable bias, by means of turning element 722 (Fig. 40, which advances adjustable ring 720. Note friction ring 754, which has teeth 764 in contact with the inner side wall of the regulator. The phrase "used to take account of the variation of the altimetric pressure" is seen as suggested use. However, any adjustment made to the bias inherently takes into account altitude, as the barometric pressure is on the back side of the diaphragm.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fenner in view of Steinert et al. Steinert shows a pressure regulator that has a flexible wall temperature responsive actuator. It would have been obvious to use a flexible wall sensor in Fenner as taught by Steinert to avoid possible leakage at the piston cylinder interface.

Claims 4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harneit. The use of knurling on a manual actuation handle is well known. It is also well known to put indicia on a handle or a fixed casing. It would have been obvious to knurl the handle for easier

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gripping, and to put indicia on the casing as a fully equivalent location (to having it on the handle).

Claims 5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Harneit or Teay in view of Baranowski et al. Baranowski shows a regulator where a knurled knob 7 is internally threaded to move with respect to a threaded housing. Detent 11 is seen as immobilization means (although not as effective as a screw through the knob to the housing). It would have been obvious to replace the Harneit or Teay bias adjustment control with the Baranowski threaded and knurled handle, threaded to the outside of the housing, as an equivalent arrangement.

Claim 11 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Iung shows a pressure regulator with a spring biased flow limiter 2.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen M. Hepperle whose telephone number is 571-272-4913. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eric Keasel can be reached on 571-272-4929. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Stephen M. Hepperle  
Primary Examiner  
Art Unit 3753

SMH